SUN XI.

013900-013906-0155

Earles No. 651 + 652

No. 661.

Profile + deck

plan.

S/S Sun XI

Hull Report No. 36159.

S/S Sun XII

Hull Rpt No 36200

S/S Sun XV

Hull Report No. 36495.

SUN XI

Recd [illegible]

28/10/22
19/6/25 (No. 661)

- No 651-2 - & 661

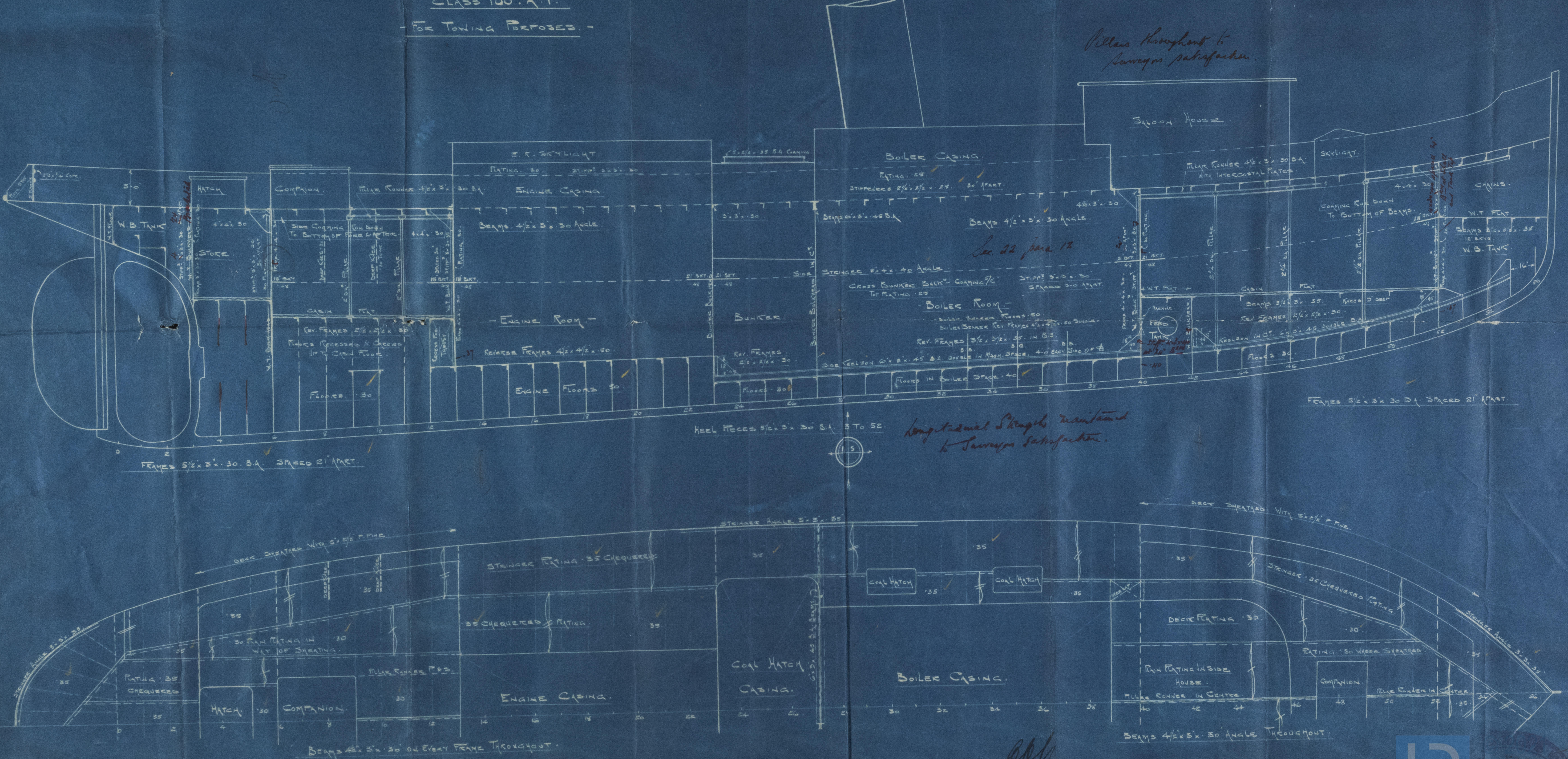
- PROFILE & DECK PLANS -

SCALE 1/4" = ONE FOOT.

LENGTH BP 100'-0" × 25'-6" MLD. × 12'-8" MLD.

CLASS 100. A. 1.

- FOR TOWING PURPOSES. -



Pillars throughout to Surveyors satisfaction.
SALOON HOUSE.
E. R. SKYLIGHT.
PLATING .30. STIFFS 3"×3"×.30.
5"×2½"×.35 B.A. COAMING
BOILER CASING.
PLATING .25.
STIFFENERS 2½"×2½"×.25. 30" APART.
SKYLIGHT.
PILLAR RUNNER 4½"×3"×.30 B.A. WITH INTERCOSTAL PLATES.
CHAINS.
2½"×¾" CORE
FORE STAY
3'-0"
HATCH
COMPANION.
PILLAR RUNNER 4½"×3"×.30 B.A.
ENGINE CASING.
W.B. TANK.
W.T. FLOOR
W.T. BULKHEAD
STORE.
4"×4"×.30.
SIDE COAMING RUN DOWN TO BOTTOM OF FORE & AFTER.
BEAMS 4½"×3"×.30 ANGLE.
3"×3"×.30.
BEAMS 6"×3"×.45 B.A.
BEAMS 4½"×3"×.30 ANGLE.
4½"×3"×.30.
COAMING RUN DOWN TO BOTTOM OF BEAMS.
W.T. FLAT.
BEAMS 3½"×3½"×.35. 12" BKTS.
W.B. TANK.
16"
Sec. 22 para 12.
DEEP KNEE
2" DIA. PILLAR.
DEEP KNEE .30 THICK
18" BKT. .48
21" BKT. .48
BUNKER BULKHEAD
BUNKER BULKHEAD IN CS.
SIDE STRINGER 5"×4"×.40 ANGLE.
CROSS BUNKER BULKD COAMING 5/16"
TOP PLATING .25
STIFFS 3"×3"×.30" SPACED 3'-0" APART
2¾" DIA. PILLAR.
2½" DIA. PILLAR.
CABIN FLAT.
W.T. FLAT.
CABIN FLAT.
BEAMS 3½"×3"×.35.
KNEES 9" DEEP.
REV. FRAMES 2½"×2½"×.30.
KEELSON IN CS. 6"×3"×.45 DOUBLE B.A.
MANHOLE
FEED TANK.
ENGINE ROOM.
BUNKER.
BOILER ROOM.
BOILER BEARER FLOORS .50.
BOILER BEARER REV. FRAMES 4½"×4½"×.50 SINGLE.
REV. FRAMES 3½"×3½"×.35. IN B.S.
SIDE KEELSON 6"×3"×.45 B.A. DOUBLE IN MACH. SPACE. 4'-0" EACH SIDE OF ℄.
REV. FRAMES 2½"×2½"×.30
FLOORS RECESSED & CARRIED UP TO CABIN FLOOR.
RECESS FOR THRUST
REVERSE FRAMES 4½"×4½"×.50.
REV. FRAMES 2½"×2½"×.30.
FLOORS .30
ENGINE FLOORS .50.
FLOORS .30
FLOORS IN BOILER SPACE .40
FLOORS .30
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56
KEEL PIECES 5½"×3"×.30" B.A. 3 TO 52.
FRAMES 5½"×3"×.30. B.A. SPACED 21" APART.
FRAMES 5½"×3"×.30 B.A. SPACED 21" APART.
Longitudinal Strength maintained to Surveyors satisfaction.
DECK SHEATHED WITH 5"×2½" P. PINE.
STRINGER ANGLE 3"×3"×.35"
STRINGER PLATING .35 CHEQUERED
DEEP KNEE
.35 CHEQUERED PLATING.
.30 PLAIN PLATING IN WAY OF SHEATHING.
PLATING .35 CHEQUERED
PILLAR RUNNER P & S.
HATCH.
COMPANION.
ENGINE CASING.
COAL HATCH CASING.
6"×3"×.45 B.A. BEAMS
COAL HATCH
COAL HATCH
BOILER CASING.
OVERLAP
DECK SHEATHED WITH 5"×2½" P. PINE.
STRINGER .35 CHEQUERED PLATING.
DECK PLATING .30.
PLATING .30 WHERE SHEATHED.
PLAIN PLATING INSIDE HOUSE.
PILLAR RUNNER IN CENTRE.
COMPANION.
PILLAR RUNNER IN CENTRE.
STRINGER ANGLE 3"×3"×.35.
.35 .30
BEAMS 4½"×3"×.30" ON EVERY FRAME THROUGHOUT.
BEAMS 4½"×3"×.30 ANGLE THROUGHOUT.

17.6.22

Earles No. 651 + 652

+ No. 661

Plan of Midship Section

S/S Sun XI

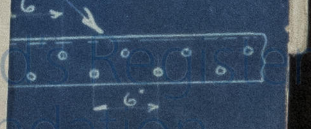
Hull Report No. 36159

S/S Sun XII

Hull Rpt No. 36200

S/S Sun XV

Hull Report No. 76495.



013900-013906-0154

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Lloyd's Register
Foundation

28/10/24
19/6/25 (No 661)

Nº 651-2. + 661

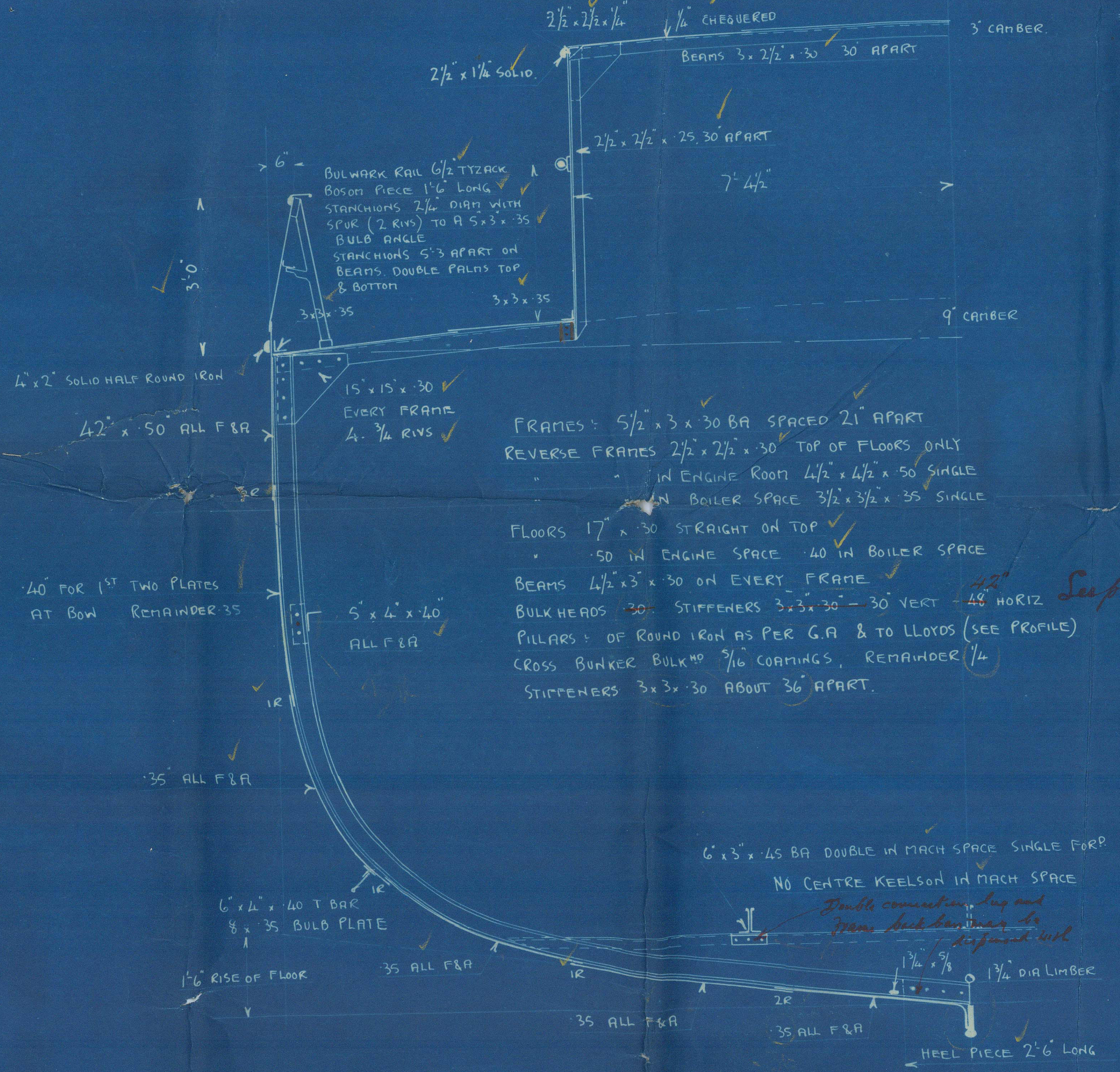
STEEL SCREW TUGS.

SECTIONS.

SCALE 1/2" = 1 FOOT

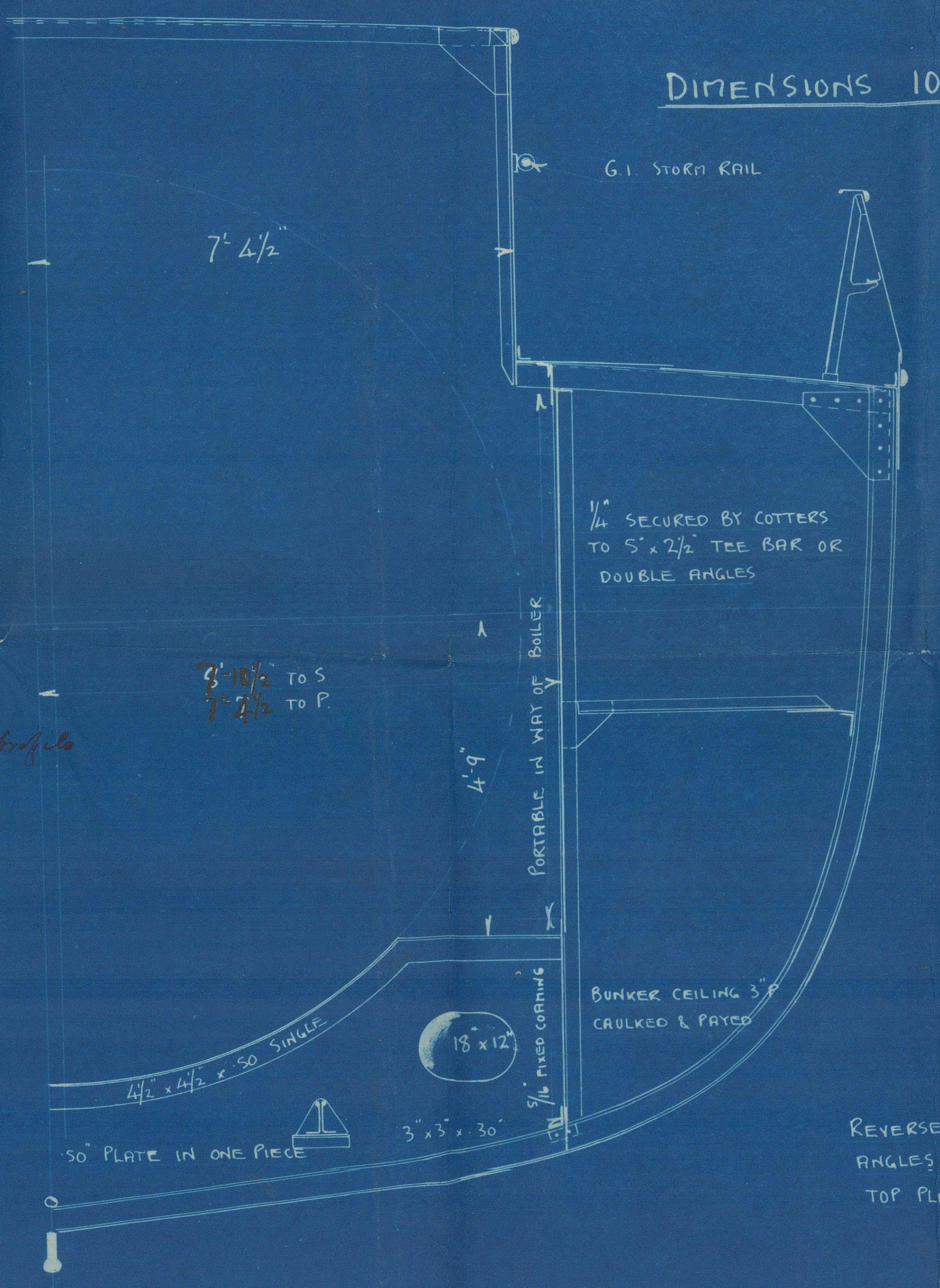
TO CLASS LLOYD 100 A.1 For Towing purposes

DIMENSIONS 100'-0" BP x 25'-6" x 12'-8" MLD.

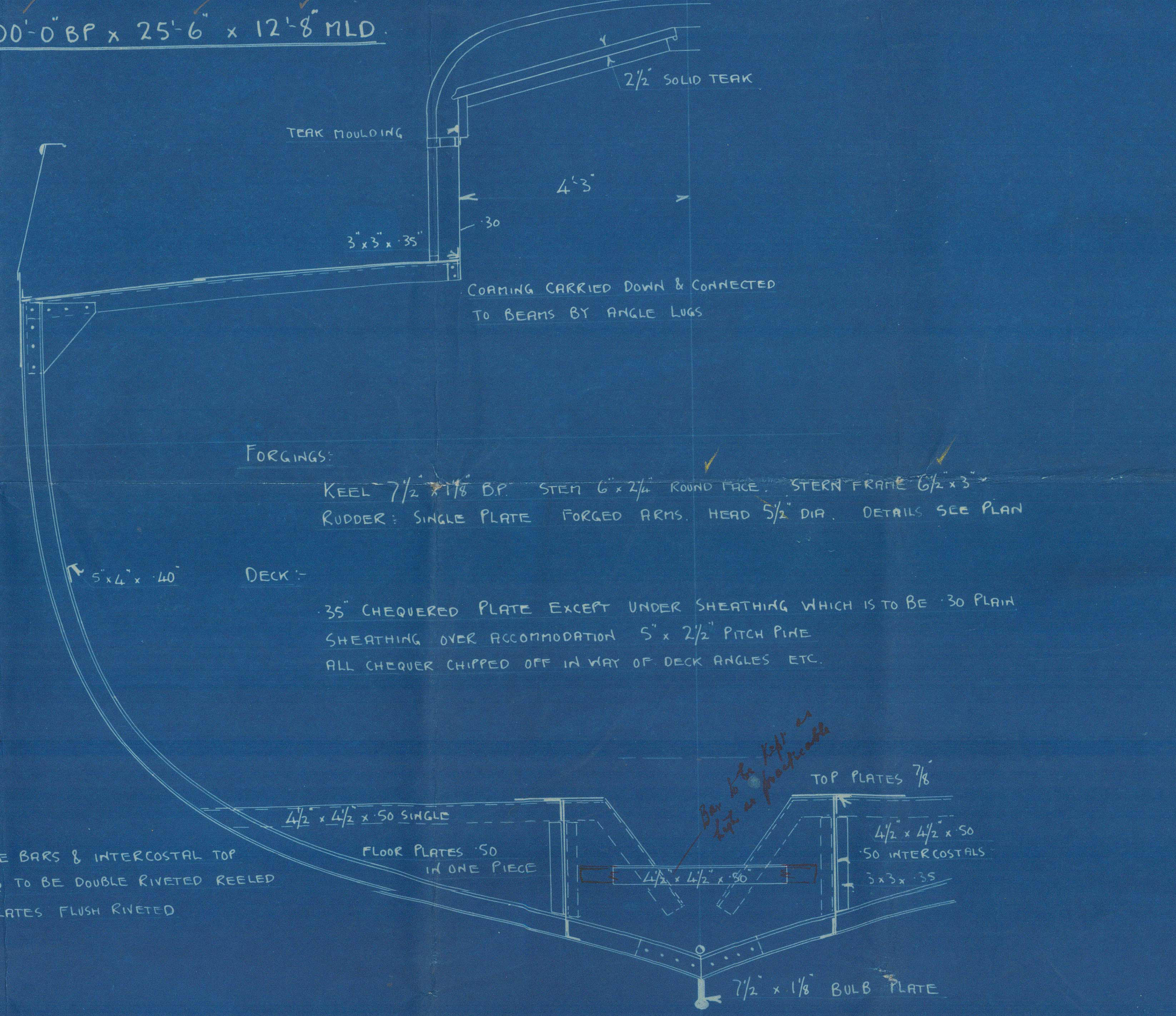

2 1/2" x 2 1/2" x 1/4"
1/4" CHEQUERED
3" CAMBER
BEAMS 3 x 2 1/2" x .30 30" APART
2 1/2" x 1 1/4" SOLID.
2 1/2" x 2 1/2" x .25. 30" APART
7'-4 1/2"
6"
BULWARK RAIL 6 1/2" TYZACK
BOSOM PIECE 1'-6" LONG
STANCHIONS 2 1/4" DIAM WITH SPUR (2 RIVS) TO A 5 x 3 x .35 BULB ANGLE
STANCHIONS 5'-3 APART ON BEAMS. DOUBLE PALMS TOP & BOTTOM
3'-0"
3x3x.35
3 x 3 x .35
9" CAMBER
4" x 2" SOLID HALF ROUND IRON
15" x 15" x .30
EVERY FRAME
4. 3/4 RIVS
42" x .50 ALL F&A
.40" FOR 1ST TWO PLATES AT BOW REMAINDER .35
5" x 4" x .40"
ALL F&A
1R
.35" ALL F&A
6" x 3" x .45 BA DOUBLE IN MACH SPACE SINGLE FORD
NO CENTRE KEELSON IN MACH SPACE
Double connection lug and frame back bar may be dispensed with
6" x 4" x .40 T BAR
8 x .35 BULB PLATE
1R
1'-6" RISE OF FLOOR
.35 ALL F&A
1R
2R
.35 ALL F&A
.35 ALL F&A
1 3/4 x 5/8
1 3/4" DIA LIMBER
HEEL PIECE 2'-6" LONG

FRAMES: 5 1/2" x 3 x .30 BA SPACED 21" APART
REVERSE FRAMES 2 1/2" x 2 1/2" x .30 TOP OF FLOORS ONLY
" " IN ENGINE ROOM 4 1/2" x 4 1/2" x .50 SINGLE
" " IN BOILER SPACE 3 1/2" x 3 1/2" x .35 SINGLE
FLOORS 17" x .30 STRAIGHT ON TOP
" .50 IN ENGINE SPACE .40 IN BOILER SPACE
BEAMS 4 1/2" x 3" x .30 ON EVERY FRAME
BULK HEADS ~~.30~~ STIFFENERS ~~3x3x.30~~ — 30" VERT — ~~48~~ 42" HORIZ See profile
PILLARS: OF ROUND IRON AS PER G.A & TO LLOYDS (SEE PROFILE)
CROSS BUNKER BULKHD 5/16 COAMINGS, REMAINDER 1/4
STIFFENERS 3 x 3 x .30 ABOUT 36" APART.

SECTION AMIDSHIPS


7'-4 1/2"
G.I. STORM RAIL
1/4" SECURED BY COTTERS TO 5" x 2 1/2" TEE BAR OR DOUBLE ANGLES
3'-10 1/2" TO S
7'-4 1/2" TO P
4'-9"
PORTABLE IN WAY OF BOILER
BUNKER CEILING 3" P CAULKED & PAYED
5/16 FIXED COAMING
18" x 12"
4 1/2" x 4 1/2" x .50 SINGLE
.50" PLATE IN ONE PIECE
3" x 3" x .30"

SECTION AT FRAME 33.


2 1/2" SOLID TEAK
TEAK MOULDING
4'-3"
.30
3" x 3" x .35"
5" x 4" x .40"
TOP PLATES 7/8"
Bar to be kept as low as practicable
4 1/2" x 4 1/2" x .50 SINGLE
FLOOR PLATES .50 IN ONE PIECE
4 1/2" x 4 1/2" x .50
4 1/2" x 4 1/2" x .50
.50 INTERCOSTALS
3 x 3 x .35
7 1/2" x 1 1/8" BULB PLATE

COAMING CARRIED DOWN & CONNECTED TO BEAMS BY ANGLE LUGS

FORGINGS:

KEEL 7 1/2" x 1 1/8" B.P. STEM 6" x 2 1/4" ROUND FACE. STERN FRAME 6 1/2" x 3"
RUDDER: SINGLE PLATE FORGED ARMS. HEAD 5 1/2" DIA. DETAILS SEE PLAN

DECK:-

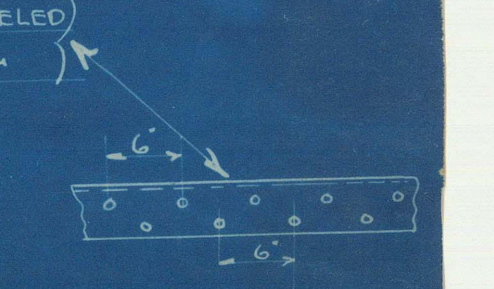
.35" CHEQUERED PLATE EXCEPT UNDER SHEATHING WHICH IS TO BE .30 PLAIN
SHEATHING OVER ACCOMMODATION 5" x 2 1/2" PITCH PINE
ALL CHEQUER CHIPPED OFF IN WAY OF DECK ANGLES ETC.

REVERSE BARS & INTERCOSTAL TOP ANGLES TO BE DOUBLE RIVETED REELED
TOP PLATES FLUSH RIVETED

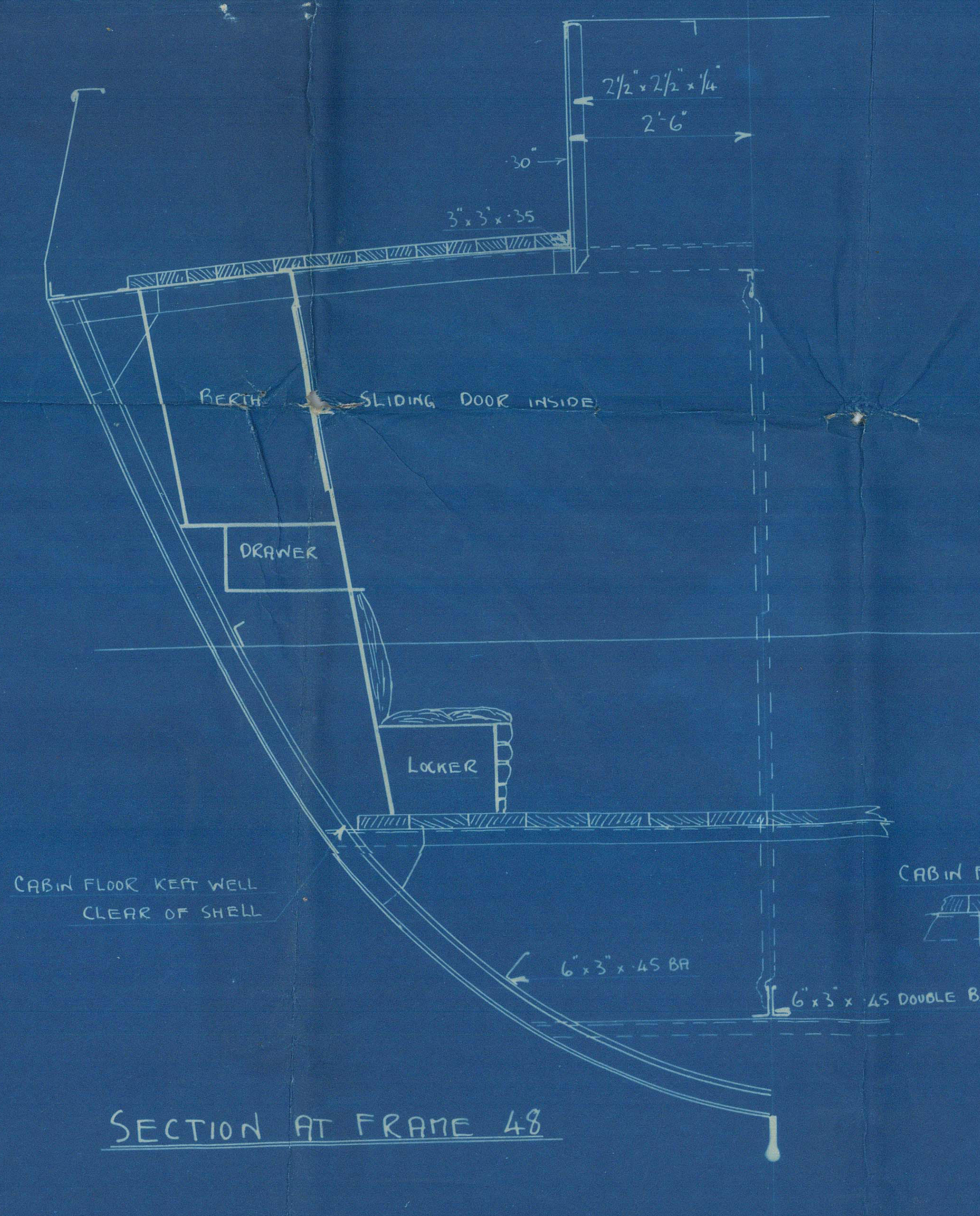
SECTION AT FRAME 21.

RIVETING

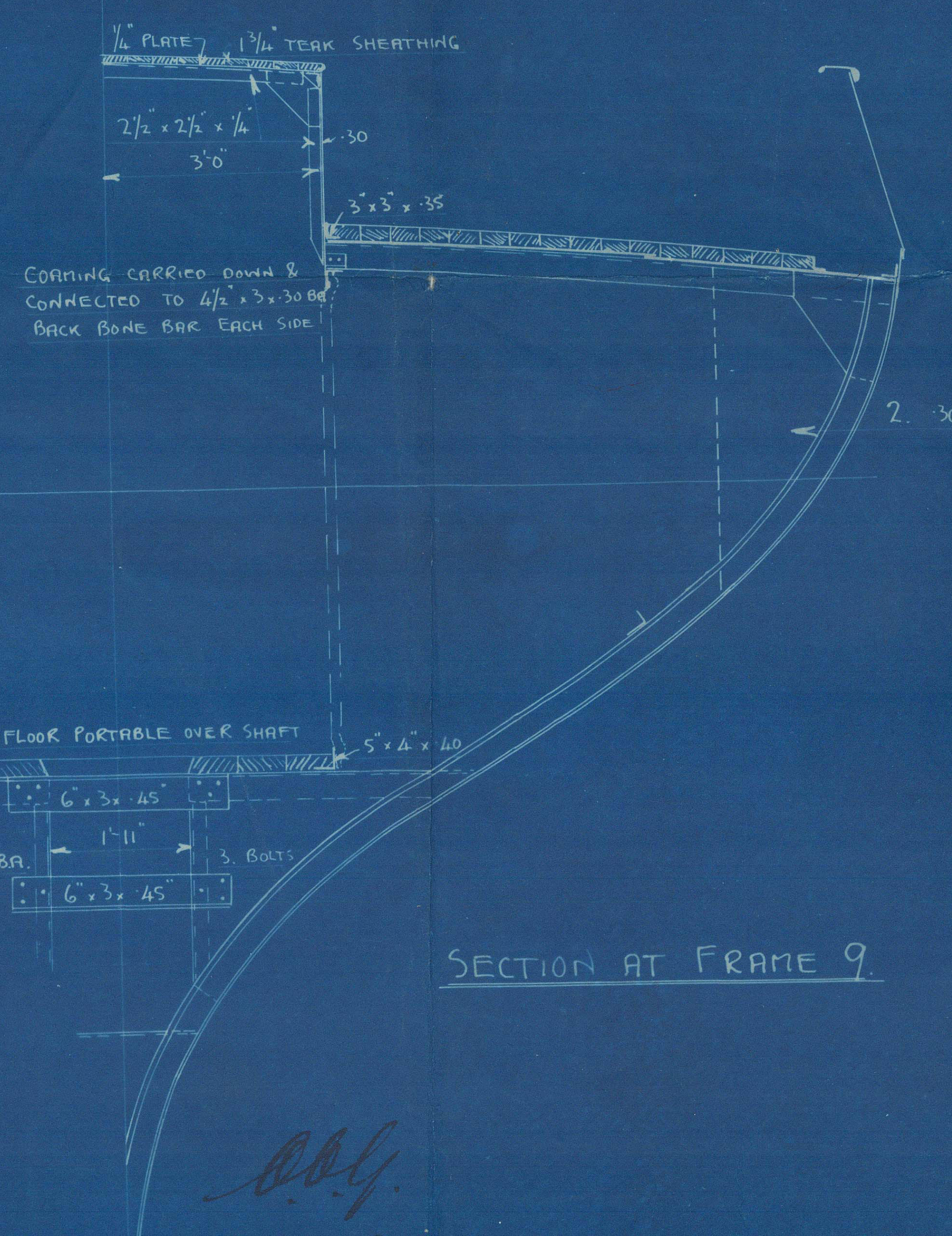
3/4"	RIVETS THRO'	FRAMES & FLOORS	SPACED	5 1/4"	APART CR TO CR
3/4"	" "	REV FRAMES & "	"	5 1/4"	" " " "
3/4"	" "	FRAMES & SHELL	"	5 1/4"	" " " " & 4 5/8" in Peaks
3/4"	" "	" " FLOORS	"	4 5/8"	" " " " IN FORE & AFTER PEAKS
7/8"	" "	REV FRAMES & FLOORS IN E.S. (4 1/2 x 4 1/2 ANGLE)	SPACED	6"	APART (REELED)
7/8"	" "	" " & ENG SEAT (" " ")	"	6"	" (")
3/4"	" "	INTERCOSTALS IN ES	"	4 5/8"	"
1"	" "	BP KEEL & GARBOARD STRAKE	SPACED	5"	APART CR TO CR EACH ROW.
3/4"	RIVS THRO	DECK PLATING & BEAMS	SPACED	5 1/4"	APART CR TO CR
3/4"	" "	" " SEAMS	"	3 3/8"	" " "
3/4"	" "	STRINGER ANGLE	"	3 3/8"	" " "
3/4"	" "	FOUNDATION ANGLES	"	3 3/8"	" " "



BUTTS OF SHEERSTAKE, DECK STRINGER & ONE STRAKE AT BILGE DOUBLE RIVETED
SHELL BUTTS DOUBLE. DECK PLATING DOUBLE FOR 1/2L. SINGLE AT ENDS
SHELL, CASINGS, BULWARKS, COAMINGS TO HAVE INSIDE BUTT STRAPS
ALL OUTSIDE WORK & INSIDE SKYLIGHT COAMINGS TO BE COUNTER SUNK FULL POINTS


2 1/2" x 2 1/2" x 1/4"
2'-6"
.30
3" x 3" x .35
BERTH
SLIDING DOOR INSIDE
DRAWER
LOCKER
CABIN FLOOR KEPT WELL CLEAR OF SHELL
6" x 3" x .45 BA
6" x 3" x .45 DOUBLE BA.

SECTION AT FRAME 48


1/4" PLATE
1 3/4" TEAK SHEATHING
2 1/2" x 2 1/2" x 1/4"
3'-0"
.30
3" x 3" x .35
COAMING CARRIED DOWN & CONNECTED TO 4 1/2" x 3 x .30 BA BACK BONE BAR EACH SIDE
2. .30" DEEP BRACKETS
CABIN FLOOR PORTABLE OVER SHAFT
5" x 4" x .40
6" x 3 x .45
1'-11"
3. BOLTS
6" x 3 x .45"

SECTION AT FRAME 9.

EQUIPMENT

TROTMAN'S PATENT { 1 BOWER ANCHOR EX STOCK 6 1/4 CWTS
1 " " " 5 1/2 CWTS
120 FATHOMS 1" STUD CHAIN CABLE
60 " 5 1/2" HAWSER
60 " 4" WARP

may be 90 fathoms

See letter regarding Kedge anchor

Kedge anchor ex stock 2 1/2 cwts supplied

CEMENTING:- 2 TO 1 BEST PORTLAND CEMENT & FINE SAND 3/4" THICK
NO CEMENTING TO BE DONE TILL AFTER LAUNCHING & WEIGHTS & C.G. OF HULL HAVE BEEN CHECKED

27.10.24.

1958
23.10.14.

013900-013906-0154

LR Foundation

Earles No. 651 + 652

+ No. 661

Plan of Sternframe + Rudder.

S/S Sun XI

Hull Report No. 36159.

S/S Sun XII
Hull Rpt 36200

S/S Sun XV

Hull Report No. 36495.

Passed 3/10/14

013900-013906-0156

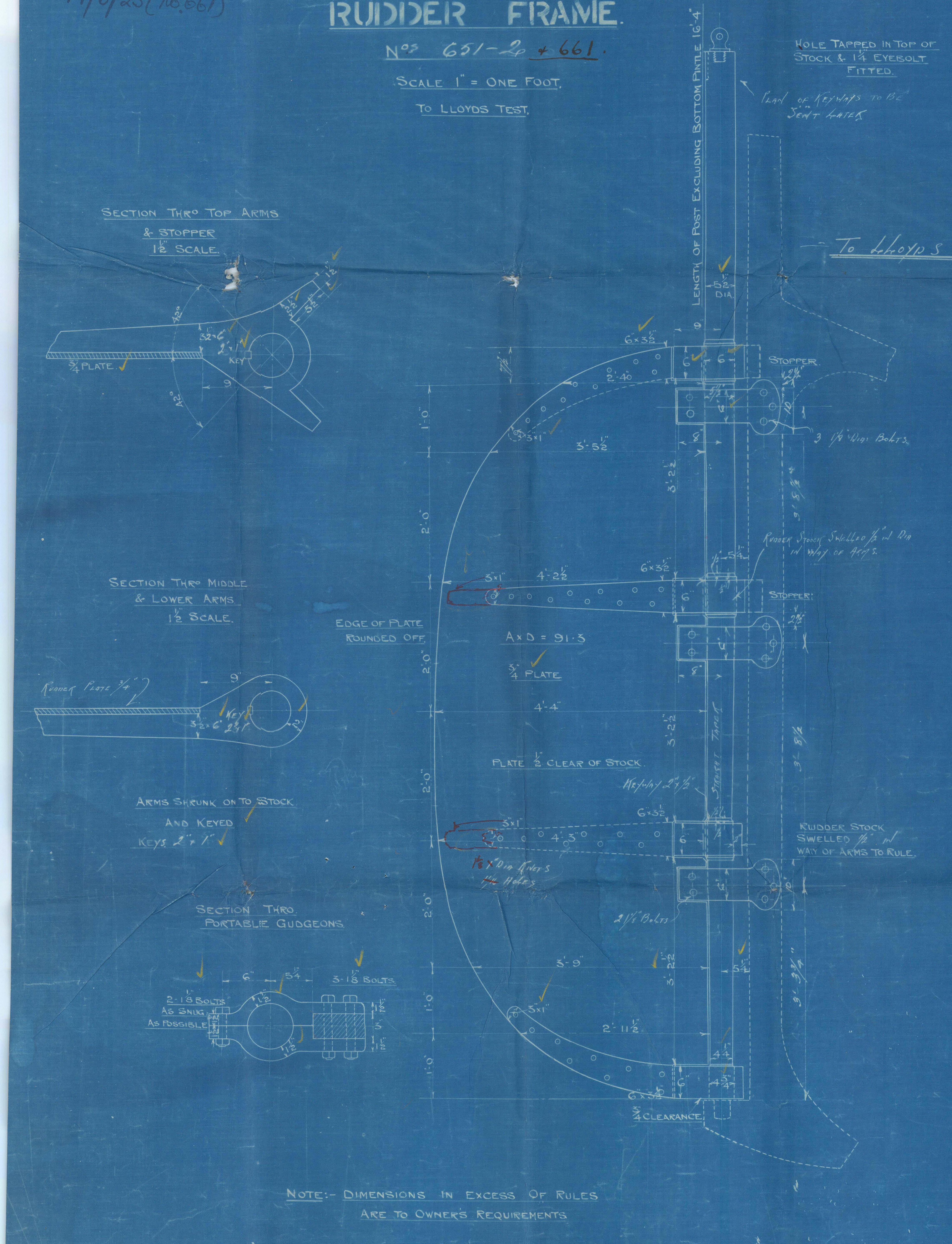
28/10/24
19/6/25 (No. 661)

RUDDER FRAME.

Nos 651-2 + 661.

SCALE 1" = ONE FOOT.

TO LLOYDS TEST.



SECTION THRO TOP ARMS & STOPPER 1½ SCALE
¾ PLATE
KEY
SECTION THRO MIDDLE & LOWER ARMS 1½ SCALE
RUDDER PLATE ¾
KEY
ARMS SHRUNK ON TO STOCK AND KEYED KEYS 2" x 1"
SECTION THRO PORTABLE GUDGEONS
2-1⅛ BOLTS AS SNUG AS POSSIBLE
5-1⅛ BOLTS
LENGTH OF POST EXCLUDING BOTTOM PINTLE 16'-4"
HOLE TAPPED IN TOP OF STOCK & 1¼ EYEBOLT FITTED
PLAN OF KEYWAYS TO BE SENT LATER
5⅝ DIA
STOPPER
3 1¼ DIA BOLTS
RUDDER STOCK SWELLED ⅛ DIA IN WAY OF ARMS
STOPPER
EDGE OF PLATE ROUNDED OFF
A x D = 91.3
¾ PLATE
PLATE ½ CLEAR OF STOCK
KEYWAY 2" x 1"
RUDDER STOCK SWELLED ⅛ IN WAY OF ARMS TO RULE
1⅛ DIA RIVETS 1¼ HOLES
2 1¼ BOLTS
¾ CLEARANCE
5'-5½
4'-2½
4'-4"
4'-3"
5'-9"
2'-11½

To Lloyds Tests

NOTE:- DIMENSIONS IN EXCESS OF RULES ARE TO OWNER'S REQUIREMENTS

NOTES:- Actual Area of Rudder = 46.8 ft
Centre of Gravity Abaft ℄ of Pintles = 1.9
Speed 11½ Knots (A x D) = (46.8 x 1.9) = 88.92 Numeral
Dia: of Rudderhead Rule = ~~4¾"~~ 5"

Boss to be Machined & Hole Bored for Shaft. Face of Boss to be Machined

Rivet Holes in Sternframe Bored 1⅟₁₆" Dia: 5" Pitch

Scarph at Fore End of Post Machined

Rudder Stock Turned for 3'0" from Top. Gauge of Rudder Head & Position of Keyway for Quadrant will be Sent

Arms on Alternate Sides of Plate Well Shrunk on & Keyed

Rivets ~~Holes~~ in Rudder Arms 1⅛ ~~1¼~~" Dia: Spaced as Shewn & Countersunk on Outer Sides of Arms

STERN FRAME.

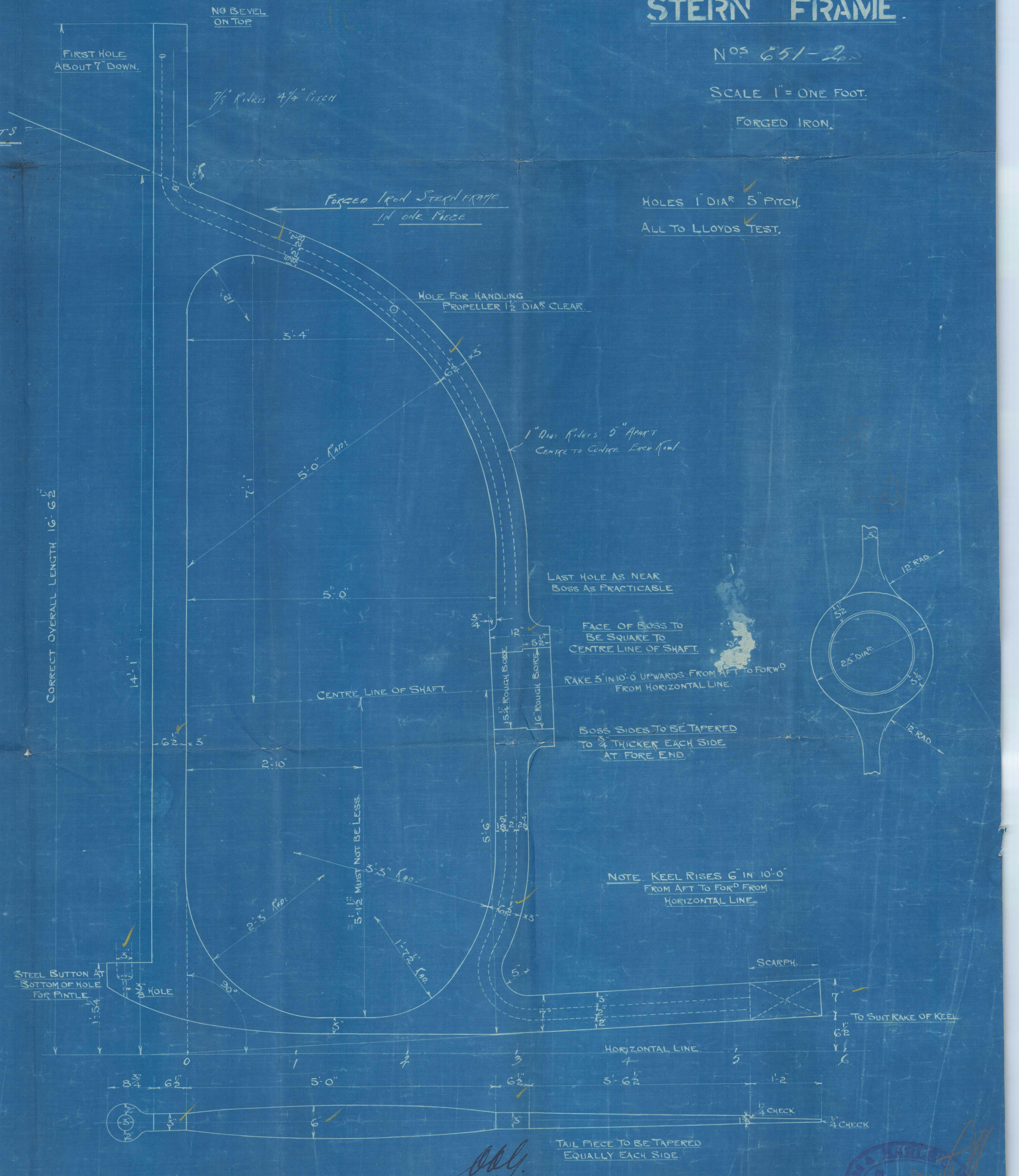
Nos 651-2

SCALE 1" = ONE FOOT.

FORGED IRON.

HOLES 1" DIAR 5" PITCH.

ALL TO LLOYDS TEST.



NO BEVEL ON TOP
FIRST HOLE ABOUT 7" DOWN.
⅞ Rivets 4¼ Pitch
FORGED IRON STERN FRAME IN ONE PIECE
HOLE FOR HANDLING PROPELLER 1½ DIAR CLEAR
1" Dia Rivets 5" Apart Centre to Centre Each Row
5'-0" RAD.
3'-4"
5'-0"
CORRECT OVERALL LENGTH 16'-6½
14'-1"
LAST HOLE AS NEAR BOSS AS PRACTICABLE
FACE OF BOSS TO BE SQUARE TO CENTRE LINE OF SHAFT.
RAKE 5" IN 10'-0 UPWARDS FROM AFT TO FORWD FROM HORIZONTAL LINE.
BOSS SIDES TO BE TAPERED TO ¼ THICKER EACH SIDE AT FORE END.
CENTRE LINE OF SHAFT
2'-10"
5'-1½ MUST NOT BE LESS
3'-3" RAD.
2'-3" RAD.
1'-7½ RAD
NOTE KEEL RISES 6" IN 10'-0" FROM AFT TO FORD FROM HORIZONTAL LINE.
STEEL BUTTON AT BOTTOM OF HOLE FOR PINTLE.
HOLE
SCARPH
TO SUIT RAKE OF KEEL
HORIZONTAL LINE
0 1 2 3 4 5 6
5'-0"
5'-6½
1'-2
8¼ 6½ 6½
1¼ CHECK
¼ CHECK
TAIL PIECE TO BE TAPERED EQUALLY EACH SIDE
12" RAD.
2.5 DIAR

27.10.24